

INTERNATIONAL SEARCH REPORT

International Search Report
PCT/GB 03/03272

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F16L13/02 F16L55/165

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	US 5 566 984 A (ABBEMA WILLIAM D ET AL) 22 October 1996 (1996-10-22) column 1, line 9 - line 51 column 5, line 25 - column 11, line 15; figures 3,5-7	1-6,8-12 7
Y	WO 02 33298 A (MCINTYRE STUART ;BOREAS CONSULTANTS LTD (GB)) 25 April 2002 (2002-04-25) cited in the application page 1, line 3 -page 4, line 11; figure 1	1-3
Y A	US 4 681 349 A (KRIEG JOHN ET AL) 21 July 1987 (1987-07-21) column 2, line 18 - line 57 column 6, line 9 - line 56 column 8, line 20 - line 32; figures 8,16-19,24,25	4-6,8-12 1,7
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

A document member of the same patent family

Date of the actual completion of the international search

24 October 2003

Date of mailing of the international search report

05/11/2003

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 03/03272

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5 988 691 A (CRUICKSHANK JOHN DUNCAN) 23 November 1999 (1999-11-23) column 4, line 53 -column 6, line 55; figures 1,3</p> <p>-----</p>	1,4-11

INTERNATIONAL SEARCH REPORT

International: Location No
PCT/GB 03/03272

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US 5988691	A	23-11-1999	AU 679618 B2 AU 1670395 A BR 9506812 A WO 9522713 A1 GB 2301416 A ,B NO 963425 A	03-07-1997 04-09-1995 09-09-1997 24-08-1995 04-12-1996 16-10-1996